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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---|---|---|---|
| 10/045,820 | 01/11/2002 | Mike Moran | NAI1P050B/02.005.01 | 2297 |

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FENWICK & WEST LLP
SILICON VALLEY CENTER
801 CALIFORNIA STREET
MOUNTAIN VIEW, CA 94041

| EXAMINER | |
|---|---|
| HERNANDEZ, OLGA | |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2144 | |

DATE MAILED: 07/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/045,820 | MORAN ET AL. | |
| | Examiner | Art Unit | |
| | Olga Hernandez | 2144 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *1/11/02*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-23* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-23* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *1/11/02* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 12 and 21 are rejected under 35 U.S.C. 102(e) as being anticipated by Bullard (6,625,657).

As per claims 1, 12 and 21, Bullard discloses a data collection module for collecting data flow a network segment; a flow processor coupled to the data collection module for classifying the collected data into a plurality of flows; a capture system coupled to the flow processor for filtering and buffering the collected data; and a main processor for processing the filtered data (figures 1, 3-6, 24, column 13, lines 55-67, column 14, lines 1-6, column 16, lines 16-61, column 18, lines 23-40, -where the cache is functional equivalent to the buffer).

Claims 1, 2, 12, 13 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Sharon et al (6,137,782).

As per claims 1, 12 and 21, Sharon discloses a data collection module for collecting data flow a network segment; a flow processor coupled to the data collection module for classifying the collected data into a plurality of flows; a capture system coupled to the flow processor for filtering and buffering the collected data; and a main processor for processing the filtered data (column 6, lines 1-20, column 7, lines 1-10, column 8, lines 38-60, figures 1-3, 5, 8).

As per claims 2 and 13, Sharon discloses the data collection module prepends the data with descriptor information, wherein the descriptor information is used by the capture system to filter the collected data (column 6, lines 1-20, column 7).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 3-9, 14-20, 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sharon et al (6,137,782) in view of Benveniste (2002/0154653).

As per claims 3 and 14, Sharon does not teach the capture system includes a capture buffer and a focus buffer, wherein the capture system filters the collected data stored in the capture buffer, wherein the filtered data is sent to the focus buffer. However, Benveniste teaches the capture system includes a capture buffer and a focus buffer, wherein the capture system filters the collected data stored in the capture buffer,

wherein the filtered data is sent to the focus buffer (paragraphs [0098]-[0100], [0148]). Thus, it would have been obvious to one skilled in the art to combine Sharon's invention with Benveniste's adaptation traffic in order to determine how the backoff distribution parameters adjusted on successive retries following transmission failure.

As per claims 4 and 15, Sharon does not teach the capture system captures the collected data in the capture buffer in at least one of a fill and stop mode, a wrap mode, a priority queuing mode, and a non-priority queuing mode. However, Benveniste teaches the capture system captures the collected data in the capture buffer in at least one of a fill and stop mode, a wrap mode, a priority queuing mode, and a non-priority queuing mode (paragraphs [0044], [0050], [0098], [0112], [0116]). Thus, it would have been obvious to one skilled in the art to combine Sharon's invention with Benveniste's adaptation traffic in order to determine how the backoff distribution parameters adjusted on successive retries following transmission failure.

As per claims 5 and 16, Sharon does not teach in priority queuing mode the capture buffer is segmented into priority and non-priority, wherein the buffer space for each queue varies dynamically based on the arrival of data that meets priority criteria. However, Benveniste teaches in priority queuing mode the capture buffer is segmented into priority and non-priority, wherein the buffer space for each queue varies dynamically based on the arrival of data that meets priority criteria (paragraphs [0044], [0050], [0098]-[0100], [0112], [0116]). Thus, it would have been obvious to one skilled in the art to combine Sharon's invention with Benveniste's adaptation traffic in order to

determine how the backoff distribution parameters adjusted on successive retries following transmission failure.

As per claims 6 and 17, Sharon does not buffers are allocated to the priority queue from the non-priority queue as the number of priority flows increases. However, Benveniste teaches buffers are allocated to the priority queue from the non-priority queue as the number of priority flows increases (paragraph [0145]). Thus, it would have been obvious to one skilled in the art to combine Sharon's invention with Benveniste's adaptation traffic in order to determine how the backoff distribution parameters adjusted on successive retries following transmission failure.

As per claims 7 and 18, Sharon does not buffers are reallocated to the non-priority queue as the number of priority flows decreases. However, Benveniste teaches buffers are allocated to the priority queue from the non-priority queue as the number of priority flows increases (paragraph [0145]). Thus, it would have been obvious to one skilled in the art to combine Sharon's invention with Benveniste's adaptation traffic in order to determine how the backoff distribution parameters adjusted on successive retries following transmission failure.

As per claims 8 and 19, Sharon does not teach the capture system selectively discards flows from the priority queue based on predetermined criteria. However, Benveniste teaches the capture system selectively discards flows from the priority queue based on predetermined criteria (paragraphs [00044], [0050], [0098], [0112], [0116]). Thus, it would have been obvious to one skilled in the art to combine Sharon's

invention with Benveniste's adaptation traffic in order to determine how the backoff distribution parameters adjusted on successive retries following transmission failure.

As per claims 9 and 20, Sharon does not teach the main processor identifies a flow as being important, wherein the flow processor uses the identification as criteria for forwarding additional data from the identified flow to the main processor. However, Benveniste teaches the main processor identifies a flow as being important, wherein the flow processor uses the identification as criteria for forwarding additional data from the identified flow to the main processor (paragraphs [0044], [0050], [0098]-[0100], [0112], [0116]). Thus, it would have been obvious to one skilled in the art to combine Sharon's invention with Benveniste's adaptation traffic in order to determine how the backoff distribution parameters adjusted on successive retries following transmission failure.

As per claim 22, Sharon teaches a data collection module for collecting data flow a network segment; a flow processor coupled to the data collection module for classifying the collected data into a plurality of flows; a capture system coupled to the flow processor for filtering and buffering the collected data; and a main processor for processing the filtered data (column 6, lines 1-20, column 7, lines 1-10, column 8, lines 38-60, figures 1-3, 5, 8). Sharon teaches the data collection module prepends the data with descriptor information, wherein the descriptor information is used by the capture system to filter the collected data (column 6, lines 1-20, column 7). As per claims 3 and 14, Sharon does not teach the capture system includes a capture buffer and a focus buffer, wherein the capture system filters the collected data stored in the capture buffer, wherein the filtered data is sent to the focus buffer. However, Benveniste teaches the

capture system includes a capture buffer and a focus buffer, wherein the capture system filters the collected data stored in the capture buffer, wherein the filtered data is sent to the focus buffer (paragraphs [0098]-[0100], [0148]). Sharon does not teach the capture system captures the collected data in the capture buffer in at least one of a fill and stop mode, a wrap mode, a priority queuing mode, and a non-priority queuing mode. However, Benveniste teaches the capture system captures the collected data in the capture buffer in at least one of a fill and stop mode, a wrap mode, a priority queuing mode, and a non-priority queuing mode (paragraphs [0044], [0050], [0098], [0112], [0116]). Sharon does not teach in priority queuing mode the capture buffer is segmented into priority and non-priority, wherein the buffer space for each queue varies dynamically based on the arrival of data that meets priority criteria. However, Benveniste teaches in priority queuing mode the capture buffer is segmented into priority and non-priority, wherein the buffer space for each queue varies dynamically based on the arrival of data that meets priority criteria (paragraphs [0044], [0050], [0098]-[0100], [0112], [0116]). Sharon does not buffers are allocated to the priority queue from the non-priority queue as the number of priority flows increases. However, Benveniste teaches buffers are allocated to the priority queue from the non-priority queue as the number of priority flows increases (paragraph [0145]). Sharon does not buffers are reallocated to the non-priority queue as the number of priority flows decreases. However, Benveniste teaches buffers are allocated to the priority queue from the non-priority queue as the number of priority flows increases (paragraph [0145]). Sharon does not teach the capture system selectively discards flows from the

priority queue based on predetermined criteria. However, Benveniste teaches the capture system selectively discards flows from the priority queue based on predetermined criteria (paragraphs [00044], [0050], [0098], [0112], [0116]). Sharon does not teach the main processor identifies a flow as being important, wherein the flow processor uses the identification as criteria for forwarding additional data from the identified flow to the main processor. However, Benveniste teaches the main processor identifies a flow as being important, wherein the flow processor uses the identification as criteria for forwarding additional data from the identified flow to the main processor (paragraphs [0044], [0050], [0098]-[0100], [0112], [0116]). Thus, it would have been obvious to one skilled in the art to combine Sharon's invention with Benveniste's adaptation traffic in order to determine how the backoff distribution parameters adjusted on successive retries following transmission failure.

Claims 10, 11, 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sharon et al (6,137,782) in view of Benveniste (2002/0154653), further in view of Cooke et al (2002/0073380).

As per claims 10 and 11, neither Sharon nor Benveniste teaches at least portion of the probe apparatus is implemented on a FPGA. However, Cooke teaches at least portion of the probe apparatus is implemented on a FPGA (paragraph 0121]). Thus, it would have been obvious to one skilled in the art to combine Sharon's invention with Benveniste's adaptation traffic and Cooke's programmable components in order to

selecting a plurality of pre-designed circuit blocks to be used to design the circuit system, at least one of said circuit blocks being programmable; and collecting reflecting the experience of the designer regarding the pre-designed circuit blocks, the designer's experience being adaptable to a processing method.

As per claim 23, Sharon teaches a data collection module for collecting data flow a network segment; a flow processor coupled to the data collection module for classifying the collected data into a plurality of flows; a capture system coupled to the flow processor for filtering and buffering the collected data; and a main processor for processing the filtered data (column 6, lines 1-20, column 7, lines 1-10, column 8, lines 38-60, figures 1-3, 5, 8). Sharon teaches the data collection module prepends the data with descriptor information, wherein the descriptor information is used by the capture system to filter the collected data (column 6, lines 1-20, column 7). As per claims 3 and 14, Sharon does not teach the capture system includes a capture buffer and a focus buffer, wherein the capture system filters the collected data stored in the capture buffer, wherein the filtered data is sent to the focus buffer. However, Benveniste teaches the capture system includes a capture buffer and a focus buffer, wherein the capture system filters the collected data stored in the capture buffer, wherein the filtered data is sent to the focus buffer (paragraphs [0098]-[0100], [0148]). Sharon does not teach the capture system captures the collected data in the capture buffer in at least one of a fill and stop mode, a wrap mode, a priority queuing mode, and a non-priority queuing mode. However, Benveniste teaches the capture system captures the collected data in the capture buffer in at least one of a fill and stop mode, a wrap mode, a priority queuing

mode, and a non-priority queuing mode (paragraphs [0044], [0050], [0098], [0112], [0116]). Sharon does not teach in priority queuing mode the capture buffer is segmented into priority and non-priority, wherein the buffer space for each queue varies dynamically based on the arrival of data that meets priority criteria. However, Benveniste teaches in priority queuing mode the capture buffer is segmented into priority and non-priority, wherein the buffer space for each queue varies dynamically based on the arrival of data that meets priority criteria (paragraphs [0044], [0050], [0098]-[0100], [0112], [0116]). Sharon does not buffers are allocated to the priority queue from the non-priority queue as the number of priority flows increases. However, Benveniste teaches buffers are allocated to the priority queue from the non-priority queue as the number of priority flows increases (paragraph [0145]). Sharon does not buffers are reallocated to the non-priority queue as the number of priority flows decreases. However, Benveniste teaches buffers are allocated to the priority queue from the non-priority queue as the number of priority flows increases (paragraph [0145]). Sharon does not teach the capture system selectively discards flows from the priority queue based on predetermined criteria. However, Benveniste teaches the capture system selectively discards flows from the priority queue based on predetermined criteria (paragraphs [00044], [0050], [0098], [0112], [0116]). Sharon does not teach the main processor identifies a flow as being important, wherein the flow processor uses the identification as criteria for forwarding additional data from the identified flow to the main processor. However, Benveniste teaches the main processor identifies a flow as being important, wherein the flow processor uses the identification

as criteria for forwarding additional data from the identified flow to the main processor (paragraphs [0044], [0050], [0098]-[0100], [0112], [0116]). neither Sharon nor Benveniste teaches at least portion of the probe apparatus is implemented on a FPGA. However, Cooke teaches at least portion of the probe apparatus is implemented on a FPGA (paragraph 0121]). Thus, it would have been obvious to one skilled in the art to combine Sharon's invention with Benveniste's adaptation traffic and Cooke's programmable components in order to selecting a plurality of pre-designed circuit blocks to be used to design the circuit system, at least one of said circuit blocks being programmable; and collecting reflecting the experience of the designer regarding the pre-designed circuit blocks, the designer's experience being adaptable to a processing method.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Olga Hernandez whose telephone number is 571-272-7144. The examiner can normally be reached on Mon-Thu 8:30am-7:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wiley can be reached on 571-272-3923. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Olga Hernandez
Examiner
Art Unit 2144